87400

9.4300 (2203, 1043, 1143)
9.4160 (3201, 1003)

S/020/60/135/006/015/037
B019/B056

AUTHORS: Kikoin, I. K., Academician, and Lazarev, S. D.

TITLE: The Isotropic and Anisotropic Components of the Even
              Photomagnetic Effect

PERIODICAL: Doklady Akademii nauk SSSR. 1960, Vol. 135, No. 6,
              pp. 1371 - 1373

TEXT: When light is perpendicularly incident upon a semiconductor
located in a magnetic field, an electric field is known to be formed. In
the case of the even photomagnetic effect, the emf is usually measured
in parallel with the direction of the magnetic field (contrary to the odd
effect, the sign of the emf does not change in the case of the photomag-
netic effect when the direction of the magnetic field is reversed). It
has been found already earlier that the even photomagnetic effect in
single crystals of Ge is anisotropic. The formula

$E = L_1 e_{ikl} n_k H_l + L_2 H_i n_k H_k + L_3 n_i H_i^2$ (2) was suggested for a phenomeno-
logical description of the photomagnetic emf. Here, L_1, L_2, and L_3 are

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The Isotropic and Anisotropic Components of the   S/020/60/135/006/015/037
Even Photomagnetic Effect   B019/B056

constants characterizing the semiconductor; e_{ikl} is an antisymmetrical
tensor; $\vec{n}$ are the components of the internal surface normal of the
semiconductor; and H_i, H_k, and H_l are the components of the magnetic
field. The last term in (2) describes the anisotropy of the photomag-
netic effect, indicating that the even photomagnetic effect may be ob-
served not only in the direction of the magnetic field, but in any direc-
tion, especially perpendicularly to the magnetic field; this is the case
even if $\theta = \pi/2$, where θ is the angle between the surface normal and the
magnetic field. The authors verified these results of the phenomenolo-
gical theory, using a disk-shaped single crystal of Ge cut out perpen-
dicularly to the $[11\bar{1}]$ axis. From the results obtained the authors con-
clude that formula (2) may be used, not only for weak, but also for
strong magnetic fields; however, the coefficients L_1 and L_2 must be con-
sidered to depend on the magnetic field. It further turned out that the
isotropic and anisotropic components of the photomagnetic emf depend on
the magnetic field, and may have different signs. The authors thank

Card 2/3

KIKOIN, I.K.; LAZAREV, S.D.

Anisotropy of the odd photomagnetic effect.   Zhur.eksp.i teor.fiz.
41 no.4:1332-1333 O '61.   (MIRA 14:10)
                    (Photomagnetic effect)

24.2600

AUTHORS: Kikoin, I. K., Nikolayev, I. N.

TITLE: The photomagnetic effect in a p-n junction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41, no. 5(11), 1961, 1692-1694

TEXT: Studies of the photomagnetic effect in semiconductors suggested a photomagnetic effect in the blocking layer between semiconductor and metal contact when the contacts are illuminated. In order to elucidate this, the following experiment has been made: A piece of n-type germanium (10 by 4 by 4 mm) had a diffusional p-n junction (due to diffusion of indium) on the one front face (4 by 4), and an ohmic contact (tin) on the other. The photomagnetic e.m.f. was measured between these contacts while the sample was illuminated and exposed to a magnetic field. This e.m.f. consists of the voltage along the homogeneous part of the sample and of the potential difference at the p-n junction. These two portions can be distinguished because the voltage along the homogeneous part depends on the area of the illuminated surface, which, e.g., may more or less be

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44247

S/056/62/043/006/063/067
B141/B102

AUTHORS: Gridin, V. A., Kikoin, I. K.

TITLE: The nonstationary photomagnetic effect in germanium single
             crystals

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
             no. 6(12), 1962, 2315-2317

TEXT: The time sequence of the photomagnetic effect for pulsating
illumination was investigated and the emf was measured as usual.
Specimens of single crystal n- and p-type germanium in the shape of disks
(30 mm diameter) were placed in a field of up to 30 koe, and light pulses
were produced by a Kerr cell; the pulse length could be varied between
5 and 2000 μsec. The maximum light flux passing through the Kerr cell was
about 10^{17} quanta/sec. The depth of modulation of the visible particle of
light was 98%. The emf of the photomagnetic effect to be measured was
recorded simultaneously with the voltage pulse on the Kerr cell by an
OK-17M(OK-17M) synchronized double-beam oscilloscope. The oscillograph

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The nonstationary photomagnetic...

S/056/62/043/006/063/067
B141/B102

curves show the dependence of the uneven emf on the time at an illumination pulse of 1 msec. If the illumination is switched off at the moment when the emf passes through a maximum, it drops to zero without change of sign. The type of illumination also governs the shape of the curve. It is shown that the dependence of the photomagnetic effect on time depends strongly on the surface recombination rate, which can be explained by the fact that the emf is proportional to the difference in concentration of the minority carriers on the illuminated and nonilluminated part of the sample surface, whilst inversely proportional to the conductivity. The change in sign of the emf on samples having identical surfaces when the illumination is switched off is caused by the dependence of the surface recombination rate on the intensity of illumination. There are 2 figures.

SUBMITTED: September 29, 1962

Card 2/2

KIKOIN, Isaak Konstantinovich; KIKOIN, Abram Konstantinovich;
        MARGULIS, U.Ya., red.; AKSEL'ROD, I.Sh., tekhn. red.

        [Molecular physics] Molekuliarnaia fizika. Moskva,
        Fizmatgiz, 1963. 500 p.   (MIRA 17:2)

KIKOIN, I. K.

Igor' Vasil'evich Kurchatov. Atom energ. 14 no.1:5-9 Ja '63.
(MIRA 16:1)

(Kurchatov, Igor' Vasil'evich, 1902-)

L 16795-63   EWT(1)/EWG(k)/EWP(q)/EWT(m)/BDS/ES(w)-?   AFFTC/ASD/ $P5$
ESD-3/AFWL/IJP(C)/SSD   Pa-4/Pab-4/Po-4, Pi-4   JD/AT
ACCESSION NR: AP3007057   S/0056/63/045/003/0428/0436

AUTHOR: Gokhberg, B. M.; Kikoin, I. K.; Knyazyatov, A. S.;
Mal'tsev, V. V.; Otroshchenko, G. A.

TITLE: Use of tritium ion beam to determine deuteron plasma
density

SOURCE: Zh. eksper. i teoret. fiziki, v. 45, no. 3, 1963, 428-436

TOPIC TAGS: deuteron plasma density, toroidal discharge chamber,
plasma density measurement, plasma density, plasma

ABSTRACT: A method for investigation of a deuteron plasma by means
of a beam of tritium ions introduced into the plasma is described.
The method is based on recording the secondary particles resulting
from reaction $D(t,n)He^4$, caused by the collision of accelerated
tritium ions with the plasma particles. The energy of the injected
tritons was approximately 160 Kev, and the energy of the neutrons
and alpha particles produced, 14 and 3.5 Mev, respectively. The

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L 16795-63
ACCESSION NR: AP3007057

investigating device was a toroidal discharge chamber in a weak longitudinal magnetic field. The principal diameter of the toroid was 750 mm, the inner diameter of the discharge chamber, about 210 mm, the intensity of the magnetic field, 200—700 oe, and the maximum discharge current, about 100 kamp. The discharge time in the chamber was approximately 600 μsec, the pulse duration of the ion source, approximately 2000 μsec, and the time delay between the start of the discharge in the chamber and the start of the pulse of the source current, 500—1000 μsec. Measurements were carried out with the discharge chamber filled with deuterium and, as a control, with hydrogen. The average plasma density over the whole path of a tritium beam was determined. Although the plasma density is greater after discharge, the increase cannot be regarded as a result of plasma compression but merely as result of the liberation of gas from the chamber walls during discharge. Orig. art. has: 8 figures.

ASSOCIATION: none
SUBMITTED: 07 Mar 63
SUB CODE: PH
Card 2/2

DATE ACQ: 08Oct63
NO REF SOV: 002

ENCL: 00
OTHER: 000

KIKOIN, I.K.; KOZYREV, Yu. P.

Fffect of a magnetic field on recombination radiation from
Ge and its quenching by infrared light. Zhur. eksp. i teor.
fiz. 45 no.5:1393-1395 N '63.   (MIRA 17:1)

BR

ACCESSION NR: AT4025309   8/0000/63/000/000/0193/0198

AUTHORS: Kikoin, I. K.; Gokhberg, B. M.; Mal'tsev, V. V.; Otrosh-
chenko, G. A.; Knyazyatov, A. S.

TITLE: Probing a deuterium plasma with a tritium beam

SOURCE: Diagnostika plazmy* (Plasma diagnostics); sb. statey.
Moscow, Gosatomizdat, 1963, 193-198

TOPIC TAGS: deuterium, tritium, plasma density, plasma electromag-
netic property, neutron yield, discharge plasma

ABSTRACT: The method is based on the registration of the number of
reactions between the incident tritium nuclei and the deuterium
nuclei of the plasma, making it possible to investigate the varia-
tion of the deuterium density independently of the degree of ioniza-
tion of the plasma and of the impurity contents. The investigation
was made in the "Igla" toroidal chamber (large diameter 750 mm,

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ACCESSION NR: AT4025309

small diameter 200 mm, maximum capacitor bank energy 35 kJ, maximum
discharge current 100 kA). The ion current and the position of the
beam were monitored with thermocouples distributed over the channel.
The tritium beam source is described elsewhere (I. I. Afanas'yev et
al. "Atomnaya energiya" v. 13, No. 8, 135, 1962). The investigation
of the neutron yield from the ion collector located on the inside of
the discharge chamber has made it possible to draw certain conclusions
concerning the absorption of the working gas (deuterium) by the walls
of the discharge chamber. However, in the case of high-frequency
ionization of the gas (preliminary ionization) the walls are capable
of absorbing a very large amount of gas. Investigations of the vari-
ation of the deuterium plasma density during the discharge time show
that the plasma density increases by several times during the dis-
charge, as a result of interaction between the plasma and the walls.
When deuterium is used in the discharge chamber, the yield of neu-
trons decreases immediately after the discharge, compared with the
yield in the absence of discharge. In the case of hydrogen, the op-

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ACCESSION NR: AT4025309

posite takes place. A control experiment has shown that the increase
is the neutron yield is not due to a displacement of the ion beam
during the discharge. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 19Oct63   DATE ACQ: 16Apr64   ENCL: 00

SUB CODE: ME   NR REF SOV: 002   OTHER: 000

Card 3/3

ACCESSION NR: AP4012524   S/0056/64/046/001/0067/0070

AUTHORS: Kikoin, I. K.; Igosheva, T. N.

TITLE: Hall coefficient and electrical resistance of ferromagnets

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 67-70

TOPIC TAGS: ferromagnet, Hall coefficient, electrical resistance, magnetic component of resistance, ferromagnetic Hall coefficient, odd galvanomagnetic effect, even galvanomagnetic effect, Curie point, magnetoresistance, Hall effect

ABSTRACT: Since the formula $R_F = A\rho^2$ which Karplus and Luttinger (Phys. Rev. v. 95, 1154, 1954) proposed for the connection between the ferromagnetic Hall coefficient and the electric resistance ρ of a substance was never confirmed experimentally, the authors show that it is physically more justified to relate R_F with the "magnetic"

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ACCESSION NR: AP4012524

part ρ_M of the resistance, brought about by spontaneous magnetiza-
tion, and show by analysis of the experimental data that the formula
$R_F - R_{FO} = a\rho_M$, where R_{FO} is the value of R_F at 0°K, holds true for
temperatures both above and below the Curie point (with possible ex-
ception of very low temperatures). The variation of the resistance
of several alloys in a magnetic field (in the paramagnetic region)
is also shown to be proportional to the magnetic resistance. It is
therefore concluded that the magnetic resistance ρ_M is the quantity
with which both the odd and even valvanomagnetic effects should be
compared. Orig. art. has: 3 figures and 7 formulas.

ASSOCIATION: None

SUBMITTED: 10Jul63   DATE ACQ: 26Feb64   ENCL: 01

SUB CODE: PH   NO REF SOV: 003

                                                   OTHER: 006

Card   2/32

KAROL', I. L.; MALAKHOV, S. G.; KIKOIN, I. K.

"Use of isotopes for quantitative investigation of atmosphere movement."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

ACCESSION NR: AP4037618   S/0056/64/046/005/1923/1925

AUTHOR: Kikoin, I. K.; Igosheva, T. N.

TITLE: Magnetic variation of the resistance of ferromagnets

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1923-1925

TOPIC TAGS: ferromagnet, ferromagnet resistance, ferromagnetic Hall coefficient, anomalous Hall coefficient, spontaneous magnetization, galvanomagnetic effect, resistance in magnetic field, para process, Curie point

ABSTRACT: In analogy with the simple connection they previously obtained (ZhETF v. 46, 67, 1964) between the ferromagnetic Hall effect and the magnetic resistance, the authors establish a relation for the change in the resistance of a ferromagnet in an external magnetic field. The consideration is limited to fields and temperatures at which the para-process takes place. The relation established is in the form

$$-\Delta\rho/\rho_M = A\,(J^2 - J_s^2)/(J_{s0}^2 - J_s^2),$$

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ACCESSION NR: AP4037618

(J- magnetization, J_s and J_{s0}--spontaneous magnetization, at given and zero temperatures) and comparison with the experimental data shows it to be the same for all the substances tested. The fact that the coefficient A in the equation is equal to 0.5 + 0.1 rather than unity is difficult to explain. An experimental determination of A itself entails considerable difficulty in view of its sensitivity to small errors in J_s and J far from the Curie point. Orig. art. has: 5 formulas and 1 figure.

ASSOCIATION: None

SUBMITTED: 09Mar64

SUB CODE: EC, EM   NR REF SOV: 004   ENCL: 02

                                                       OTHER: 002

Card   2/4

L 8444-65   EWT(1)/EWG(k)/T   Ps-6   IJP(c)/AS(mp)-2/SSD/AFWL/ASD(a)-5/ESD(gs)/
ESD(t)/RAEM(t)   AT
ACCESSION NR: AP4043662

S/0056/64/047/002/0780/0781

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

TITLE: New photopiezoelectric effect in semiconductors

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 780-781

TOPIC TAGS: photopiezoelectric effect, photopiezoelectricity, piezoelectric effect, piezoelectricity, photoelectric effect, carrier diffusion, germanium, semiconductor

ABSTRACT: When a rectangular n-type germanium single crystal is spotlighted with a beam illuminating only the central portion of its (111) plane, and, at the same time, the crystal is subjected to one-sided pressure along its longer axis, a potential difference develops between the end terminals which can be easily detected with a galvanometer. A 180° rotation of the sample about its piezoelectric axis, with the direction of the light beam and the position of the electrodes unchanged, reverses the sign of the potential difference; a similar 90° rotation reduces the potential differ-

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L. 8/4/4-65
ACCESSION NR: AP4043662

ence by more than one order of magnitude; the effect becomes vanish-
ingly small if the (100) plane instead of the (111) plane is illumi-
nated. This phenomenon, never before observed, termed the photopiezo-
electric effect by the authors, is tentatively explained by the ani-
sotropy of the carrier diffusion coefficient, caused by the one-sided
deformation of the crystal, the diffusion being brought about by the
difference of carrier concentration on the illuminated and the non-
illuminated side of the sample. The investigation is being continued
and extended to other semiconductors. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 03Jun64

SUB CODE: EM, SS

ATD PRESS: 3098

NO REF SOV: 000

ENCL: 00

OTHER: 001

Card 2/2

L 14301-65   EWA(h)/EWG(k)/EWT(l)/T   Peb   AEDC(a)/SSD/AFWL/AS(mp)-2/
AFMD(t)/ESD(gs)/ESD(t)/IJP(c)   AT
ACCESSION NR: AP4047935   S/0056/64/047/004/1600/1601

AUTHORS: Kikoin, I. K.; Kozy*rev, Yu. P.

TITLE: Spectral distribution of the effect of quenching of recom-
bination radiation in germanium by infrared light

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47,
no. 4, 1964, 1600-1601

TOPIC TAGS: recombination emission, luminescence quenching, ger-
manium, ir phenomenon, carrier injection, photoconductivity

ABSTRACT: Preliminary results are reported of the study of the
spectral distribution of the quenching of recombination radiation
of germanium, observed by the authors in earlier work (ZhETF v. 45,
1393, 1963). Germanium discs of about 10 mm diameter and 4 mm to
50 μ thick, were placed in a special holder and minority carriers
injected by illumination with white light from an incandescent lamp,

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L 14301-65
ACCESSION NR: AP4047935

filtered with water so that only wavelengths <1 μ reach the sample. The light was modulated at 117 cps by a rotating disc with apertures. The same surface could be illuminated with unmodulated monochromatic infrared light. The recombination radiation was measured with a lead sulfide photo-resistor, a tuned amplifier, a synchronous detector and an automatic recorder. p-type and n-type samples of 50 ohm-cm resistivity and n-type samples of 40, 20, and 11 ohm-cm resistivity the quenching effect had a maximum near 2.7 μ and 3.6 μ. For p-type samples of 0.7 and 3 ohm-cm resistivity, only one quenching maximum was observed at 2.7 μ, with an amplitude smaller than that for high-resistivity samples. For germanium samples of both types with resistivity on the order of 0.01 ohm-cm no quenching was observed at all. The possible analogy between this effect and photoconductivity quenching is suggested. Orig. art. has: 2 figures.

ASSOCIATION: None

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L 14301-65

ACCESSION NR: AP4047935

SUBMITTED: 29Jul64

SUB CODE: OP

NR REF SOV: 003

ENCL: 00

OTHER: 000

Card 3/3

L 00755-66   EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h)   IJP(c)   JD/AT

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

TITLE: Anisotropy of the odd-parity photomagnetic effect in germanium in strong effective magnetic fields

TOPIC TAGS: photomagnetic effect, germanium semiconductor, semiconductor research, semiconductor theory

ABSTRACT: Previous studies have shown anisotropy in both the even- and odd-parity photomagnetic effects in germanium. A microscopic theory for anisotropy of the photomagnetic effects was recently developed by Kagan and Sobakin (Yu. Kagan, V. Sobakin, $J.$ $Phys.$ $Chem.$ $Solids$, 26, 1965 [in press]). According to this theory, when $\omega \gg \tau$ (ω is the gyclotron frequency of the carriers and τ is relaxation time), a unique anomaly should be observed in the anisotropic component of the odd-parity photomagnetic emf V as a function of the angle θ between the direction of the magnetic field and the normal to the illuminated surface of the semiconductor. The

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L 00755-66

ACCESSION NR: AP5021730

authors measured the odd-parity photomagnetic emf in n- and p-germanium at 77°K.
The angular effect on odd-parity photomagnetic emf in various field strengths for
both types of germanium is shown in fig. 1 of the Enclosure. The odd-parity ani-
sotropic photomagnetic emf is given as a function of magnetic field strength H at
various values of the angle θ for both types of germanium in fig. 2 of the Enclo-
sure. The experimental results show extremely good agreement with the Kagan-
Sobakin theory. "The authors are grateful to Yu. Kagan and V. Sobakin for fruit-
ful consultation." Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 25May65

NO REF SOV: 002

ENCL: 02

OTHER: 001

SUB CODE: SS, EM

Card_2/4
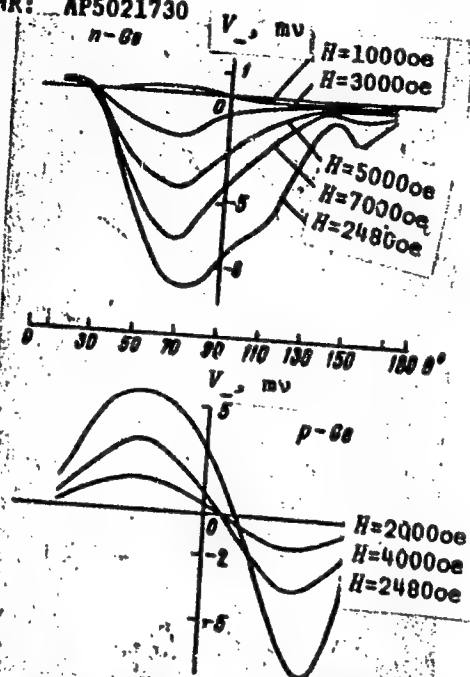
L 00755-66

ENCLOSURE: 01

Fig. 1

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L 00755-66

ACCESSION NR: AP5021730

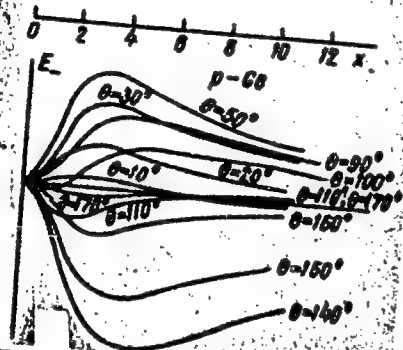ENCLOSURE: 02
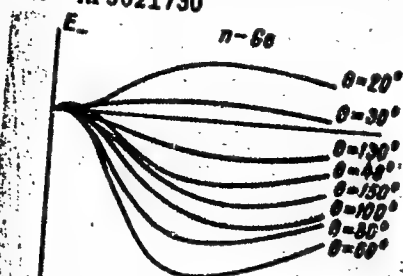
Fig. 2

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L 00345-66   EWT(1)/EPA(s)-2/EWT(m)/EWP(w)/EPF(n)-2/T/EWP(t)/EWP(b)   IJP(c)
JD/WW/JG

ACCESSION NR: AP5019224   UR/0056/65/049/001/0124/0126.

AUTHOR: Kikoin, I. K.; Senchenkov, A. P.; Gel'man, E. V.; Korsunskiy, M. M.;
Naurzakov, S. P.

TITLE: Electric conductivity and density of metallic vapor

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965,
124-126

TOPIC TAGS: mercury, electric conductivity, pressure effect, temperature dependence,
high temperature research

ABSTRACT: The article describes an investigation of the electric conductivity of
mercury in the transcritical range of temperatures and pressures. The experiments
were carried out in a chamber in which pressures up to 4000 atm could be establish-
ed by means of gaseous argon compressed with a thermal compressor. The mercury was
contained in a capillary whose mid-section could be heated electrically to 2000C.
The transcritical conditions were established only in the middle part of the capil-
lary. The mercury was activated in a reactor before the experiments, and its den-
sity was determined by measuring the γ radiation from the Hg^{203}. The measured
quantities were automatically recorded with multichannel automatic plotter. The

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L 00345-66
ACCESSION NR: AP5019224   ⏾

family of curves plotted at different pressures made it possible to determine the
"electrical equation of state" $r = f(\rho, T)$ and the thermodynamic equation for the
density $\rho = \phi(P, T)$ (r = resistivity, ρ = density, T = temperature, P = pressure).
The critical temperature of mercury was found to be 1450 ± 50C. The measurement
accuracy was insufficient to determine the temperature coefficient of resistivity,
but it was found to be negative at densities below 7—8 g/cm^3 and close to zero at
higher density. A more detailed description of the results and of the experiments
will be published elsewhere. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 19Feb65   ENCL: 00   SUB CODE: EM, TD

NO REF SOV: 001   OTHER: 003

Jw

Card 2/2

L 8155-66   EWT(1)/EWT(m)/EWP(b)/EWP(t)   IJP(c)   JD
ACCESSION NR: AP5019895

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

UR/0181/65/007/008/2564/2565

TITLE: On the anisotropy of the even photomagnetic effect in p-germanium in strong magnetic fields

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2564-2565

TOPIC TAGS: germanium, photomagnetic effect

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF v. 39, 11, 1960) on the anisotropic even photomagnetic effect in n-germanium. The present in-vestigation was made on p-germanium and its purpose was to check on a detailed theo-ry of anisotropic photomagnetic effect, developed by Yu. M. Kagan and V. N. Sobakin in a companion paper (FTT v. 7, 2565, 1965, Acc. nr. 5019896). The investigated germanium sample was cut in such a way that the normal to the illuminated surface of the sample coincided with the (111) crystallographic axis. The measurements were perfectly analogous to those made in the earlier investigation by the authors. The experimental data agreed fully with the theory of Kagan and Sobakin. "The authors thank Yu. M. Kagan and V. N. Sobakin for a fruitful discussion of the results."
Orig. art. has: 2 figures.

Card 1/2

L 8155-66

ACCESSION NR: AP5019895

ASSOCIATION: None

SUBMITTED: 08Apr65

NR REF SOV: 003

ENC: 00

OTHER: 000

SUB CODE:SS

jw

Card 2/2

L 28885-66   EWT(1)   IJP(c)

ACC NR: AP6018700   SOURCE CODE: UR/0386/66/003/011/0434/0436

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

ORG: none

TITLE: Oscillations of the photomagnetic effect with the magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 11, 1966, 434-436

TOPIC TAGS: indium compound, antimonide, photomagnetic effect

ABSTRACT: To check whether in indium antimonide the photomagnetic effect oscillates with the magnetic field, the authors measured both the even and odd photomagnetic emf's in InSb in magnetic fields up to 23,000 oe at liquid-helium temperature (4.2K). The sample, with carrier density 10^{13} at/cm^3, was equipped with two sets of mutually perpendicular electrodes to measure the odd and even photomagnetic emf's, respectively. The even effect was measured with the sample inclined 30° to the magnetic field. The even emf was measured in the direction of the projection of the field on the plane of the sample. Plots of the emf's against the field show that the oscillations begin at the relatively low value 2000 oe for the odd photomagnetic effect and 4000 oe for the even one. The data for the odd effect agree qualitatively with the theory developed by V. N. Sobakin (Dokl. AN SSSR v. 167, 71, 1966). There is as yet no quantitative theory for comparison with the results on the even effect. Orig. art. has: 1 figure.   [02]

SUB CODE: 20/   SUBM DATE: 30Mar66/   ORIG REF: 002/ ATD PRESS: 5006

Card 1/1 UC

24(3)
AUTHORS: Karchevskiy, A. I.,   Artyushkov, Ye. V.,   Kikoin, L. I.

TITLE: The Isotopic Shift of the Curie Point in the Hydride and Deuteride of Uranium (Izotopicheskiy sdvig tochki Kyuri v gidride i deyteride urana)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 2, pp 636-637 (USSR)

ABSTRACT: The detection of the ferromagnetism of uranium hydride and uranium deuteride (Refs 1, 2, 3) made it possible to investigate the isotopic shift of the Curie (Kyuri) temperature. One of these possibilities is given by the fact that the distance between the uranium ions is different in the 2 above-mentioned compounds. There are several methods which permit a sufficiently precise determination of the Curie temperature in ferromagnetics. The authors of the present paper investigated the temperature dependence of the remanent magnetization of samples of uranium hydride and uranium deuteride in order to obtain preliminary results concerning the shift of the Curie point. The remanent magnetization of

Card 1/3   the samples was measured by an astatic magnetometer. The

SOV/56-36-2-54/63

The Isotopic Shift of the Curie **Point in the** Hydride and Deuteride of Uranium

authors prepared more than 20 samples of uranium hydride and
uranium deuteride. For any investigated sample, a difference
was observed between the Curie temperatures   of uranium
hydride and uranium deuteride. This shift practically does
not depend on the degree of purity of the original uranium
and it is, therefore, not caused by chemical impurities.
Typical curves for the temperature dependence for the remanent
magnetization are shown in a figure. According to this figure,
the difference of the Curie temperatures of uranium hydride
and deuteride amounts to 4°, and the mean error amounts to
0.5^o. The shift $\Delta\theta$ of the Curie temperature therefore is
equal to θ_{UH_3} - θ_{UD_3} $= \Delta\theta = +(4.0 \pm 0.5)^o K$. The absolute

value of the Curie temperature cannot be found according to
the method described in this paper. The Curie point deduced
by extrapolation from the temperature dependence of the remanent
magnetization of a given sample practically does not depend
on external influences. The authors suggest   investigating
the absolute value of the Curie temperature of uranium hydride
and uranium deuteride, and they thank Academician I. K. Kikoin
Card 2/3   for suggesting the problem discussed in this paper and for his

SOV/56-36-2-54/63

The Isotopic Shift of the Curie Point in the Hydride and Deuteride of Uranium

help. There are 1 figure and 4 references, 2 of which are Soviet.

SUBMITTED: November 18, 1958

Card 3/3

KIKOIN, Ye. K.

Geography, Economic - Study and Teaching

Utilization of supplemental literature in lessons of economic geography in seconda y schools. Geog. v shkole no. 1, 1952.

KIKOIN, Ye.K.

Work of a geography club. Geog.v shkole no.5:53-57 S '53. (MLRA 6:8)

(Geography—Study and teaching)

BOGDANOV, Daniil Vasil'yevich; STEPANOV, V.N., doktor geogr. nauk,
retsenzent; DERYABINA, E.A., retsenzent; KIKOIN, Ye.K.,
metodist, retsenzent; VASIL'YEVA, O.S., red.

[Stories about the world ocean; a reader. Textbook for
teachers] Rasskazy o mirovom okeane; khrestomatiia. Po-
sobie dlia uchitelia. Moskva, Uchpedgiz, 1963. 159 p.
(MIRA 17:7)

1. Zaveduyushchiy kabinetom geografii Voronezhskogo in-
stituta usovershenstvovaniye uchiteley (for Deryabina).
2. Geograficheskiy fakul'tet Odesskogo Gosudarstvennogo
universiteta (for Kikoin).

KIKOLE, V.

Development of Lodz. p. 9.

Periodical: GEOGRAFSKI OBZORNIK.

GEOGRAPHY & GEOLOGY

Vol. 5, no. 2, 1958.

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

KIKOLOV, A. I., Cand. Medic. Sci. (diss) "Physiological Basis of System of Work at Control Panel (for Work of Mental and Emotional Intensity)," Moscow, 1961, 19 pp. (Acad. Med. Sci.) 250 copies (KL Supp 12-61, 285).

KIKOLOV, A.I. (Moskva)

Physiological changes observed in attendants on duty and control desk operators of the Moscow subway. Gig. truda i prof. zab. 4 no.2:20-26 F '60.   (MIRA 15:3)

1. Institut gigiyeny truda i professional'nykh zabolevaniy AMN SSSR.

(MOSCOW--SUBWAYS--HYGIENIC ASPECTS)

KIKOLSKI, B.

Development of geography in China. p. 137

PRZEGLAD GEOGRAFICZNY. POLISH GEOGRAPHICAL REVIEW. (Polska Akademia Nauk.
Instytut Geografii) Warszawa, Poland. Vol. 31, no. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960
Uncl.

KIKOLSKI, Bohdan (Warszawa)

Everlasting frozen soils on the Tsinghai-Tibetan plateau. Czasop
geograf 34 no.1:67-68 '63.

KIKOR, W.; Kotarska, A.

ω) -naphthalene - δ -ketocarboxylic acids. I. 6-(naphthyl-1)-4-keto-2,2-
dimethylhexanecarboxylic acid.   p. 35

ACTA CHIMICA. (Lodzkie Towarzystwo Naukowe. Wydzial III: Nauk Matematyczno-
Przyrodniczych) Lodz, Poland. Vol. 3, 1958

Uncl.

BLOKHIN, A.S., redaktor; KIKOSOV, L.V., redaktor; SOKOLOVA, R.Ya., tekh-
nicheskiy redaktor

[12-channel system of high-frequency telephone communication in
type K-12 cable communication lines; a collection of instructions]
12-kanal'naia sistema vysokochastotnogo telefonirovaniia po kabel'-
nym liniiam sviazi (tipa K-12); infcrmatsionnyi sbornik. Moskva,
Gos. izd-vo lit-ry po voprosam sviazi i radio, 1954. 162 p. [Micro-
film]
                                                          (MLRA 8:6)

1. Russia (1923- U.S.S.R.) Ministerstvc svyazi. Tekhnicheskoye
upravleniye.
        (Telephone lines)

KAZITSYNA, L.A.; KIKOT', B.S.; ASHKINADZE, L.D.; REUTOV, O.A.

Correlation of the frequencies and intensities of infrared absorption bands for diazonium salts $X - C_6H_4N_2Cl$ with the constants of the substituent. Dokl. AN SSSR 151 no.3:573-576 Jl '63.

(MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).

(Diazonium compounds—Absorption spectra)

(Substitution (Chemistry))

TERENT'YEV, A.P.; VOLODINA, M.A.; KIKOT', B.S.; MISHINA, V.G.; KOMISSAROV, I.V.

Synthesis and properties of pyrrolidine bases. Part 10: Synthesis of α-amino-ω-pyrrolidyl alkanes and α,ω-bispyrrolidyl alkanes, derivatives of heptane, octane, nonane, decane. Zhur.ob.khim. 34 no.1:209-213 Ja '64.   (MIRA 17:3)

KAZITSYNA, L. A.; REUTOV, O. A.; KIKOT', B. S.; RASSADIN, B. V.

Ultraviolet absorption spectra of hydroxy- and methoxyphenyl
diazonium chlorides. Izv. AN SSSR. Ser. fiz. 27 no.1:53-55
Ja '63.   (MIRA 16:1)

1. Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo
universiteta im. M. V. Lomonosova.

(Diazonium compounds—Spectra)

KAZITSYNA, L.A.; KUPLETSKAYA, N.B.; POLSTYANKO, L.L.; KIKOT', B.S.;
KOLESNIK, Yu.A.; TERENT'YEV, A.P.

Ultraviolet absorption spectra of alkyl imines of acetylacetone and
β-hydroxynaphthaldehyde. Zhur. ob. khim. 31 no.1:313-323 Ja '61.
(MIRA 14:1)

1. Moskovskiy gosudarstvennyy universitet.
(Naphthaldehyde)   (Acetone)
(Imines--Spectra)

KAZITSYNA, L.A.; REUTOV, O.A.; KIKOT', B.S.

Infrared absorption spectra of double salts of o- and m-substituted
aryldiazonium chlorides with metal chlorides. Zhur.ob.khim. 31
no.9:2950-2957 S '61.   (MIRA 14:9)
        (Diazonium compounds--Spectra) (Chlorides--Spectra)

44942

5 5050

AUTHORS: Kazitsyna, L. A., Reutov, O. A., Kikot', B. S., and
              Rassadin, B. V.

TITLE: Ultraviolet absorption spectra of hydroxy and methoxy-phenyl
              diazonium chlorides

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27,
   no. 1, 1963, 53-55

TEXT: The ultraviolet absorption spectra of o-hydroxy-phenyl and p-hydroxy-
phenyl diazonium chlorides in aqueous acid, neutral, and alkaline solutions
were studied to explain the mechanism of converting the diazonium cation
into quinone diazide. The spectra of solutions of o-methoxy and p-methoxy-
phenyl diazonium chlorides were compared. The spectra of hydroxy compounds
in strongly acid solutions of 5 N - 0.5 N HCl are consistent with those of
methoxy compounds. This proves the existene of diazo cations. In neutral,
aqueous solutions, hydroxy-phenyl diazonium chlorides exist as quinone
diazides. Conversion of the diazo cation into quinone diazide is a
reversible process. The curves of absorption in weakly acid solutions

Card 1/2

Ultraviolet absorption spectra of ...

$(0.1\ N - 4\cdot10^{-4}\ N\ HCl)$ show the conversion to be determined by a dissociation equilibrium establishing rapidly:

$$HO-\!\!\!\bigcirc\!\!\!-N\!\!=\!\!N \rightleftharpoons O=\!\!\!\bigcirc\!\!\!=N_2 + H^+.$$
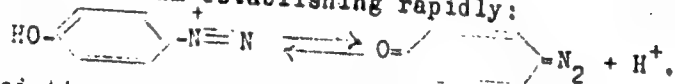
The dissociation constant in ortho-isomers is much higher than in para isomers. All studied compounds were found to be unstable in dilute alkaline solutions. o-methoxy and p-methoxy-phenyl diazonium chlorides in concentrated lyes yield diazotates, whereas hydroxy derivatives are decomposed without the formation of diazotates. There are 2 figures and 1 table.

ASSOCIATION: Kafedra organicheskoy khimii Moskovskogo gos. universiteta im. M.V. Lomonosova (Department of Organic Chemistry of the Moscow State University imeni M.V. Lomonosov)

Card 2/2

BOKIY, N.G.; POLYNOVA, T.N.; PORAI-SHITS, M.A.; KIKOT', B.S.; KAZITSYNA, L.A.

Crystal structure of the double diazonium salt of ferric chloride
with o-methoxyphenyl diazonium chloride. Zhur.strukt.khim. 4
no.3:453-454 My-Je '63.   (MIRA 16:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
                (Diazonium compounds) (Crystallography)

KAZITSYNA, L.A.; REUTOV, O.A.; KIKOT', B.S.

Double diazonium salts of mercury chlorides and trivalent antimony. Zhur. ob. khim. 33 no.5:1561-1570 My '63.

(MIRA 16:6)

(Diazonium compounds)
(Salts, Double)

KIKOT', B.S.; KOLESNIK, Yu.A.

Diazonium salts of arylsulfonic acids. Infrared spectra in the region 2100-2300 cm^{-1}. Zhur.ob.khim. 33 no.3:997-1001 Mr '63.   (MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova i Moskovskiy institut narodnogo khozyaystva imeni G.V. Plokhanova.
            (Diazonium compounds—Absorption spectra)
                    (Sulfonic acids)

KIKOT', B. S.; KAZITSYNA, L. A.; REUTOV, O. A.

Constitution of o- and p-hydroxyphenyl diazonium cations
containing SO_3H- and COOH groups. Izv AN SSSR Ser Khim no. 4:
756-758 Ap '64.   (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.

KAZITSYNA, L. A.; KIKOT', B. S.; RASSADIN, B. V.; REUTOV, O. A.

Ultraviolet spectra of methoxyphenyldiazonium chlorides.
Zhur. ob. khim. 32 no.12:3977-3982 D '62.

(MIRA 16:1)

(Diazonium compounds—Spectra)

KAZITSYNA, L. A.; KIKOT', B. S.; RASSADIN, B. V.; REUTOV, O. A.

Ultraviolet absorption spectra of hydroxyphenyldiazonium
chlorides. Zhur. ob. khim. 33 no.1:223-227 '63.
(MIRA 16:1)

(Diazonium compounds--Spectra)

KIKOT', B. S.

Synthesis of o- and p- benzoquinone diazides. Zhur. ob. khim.
33 no.1:227-229 '63.   (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni M. V.
Lomonosova.

(Cyclohexadienone)

KAZITSYNA, L.A.; KIKOT', B.S.; ASHKINADZE, L.D.; REUTOV, O.A.

Infrared spectra of hydroxyphenyl diazonium compounds in the region
2100 to 2300 cm^{-1}. Zhur.ob.khim. 33 no.7:2238-2244 Jl '63.

(MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.^{V}.Lomonosova.
(Diazonium compounds—Absorption spectra)

KAZITSYNA, L.A.; KIKOT', B.S.; REUTOV, O.A.

Infrared absorption spectra of diazomium salt solutions in
the region 2200 - 2300 cm^{-1}. Izv. AN SSSR. Ser. khim. no.6:
955-959 Je '64.   (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

KAZITSYNA, L.A.; KIKOT' B.S.; VINOGRADOVA, L.Ye.; REUTOV, O.A., akademik

Products of interaction between quinone diazides and metal
halides. Dokl. AN SSSR 158 no.6:1369-1372 O '64.

(MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet.

L 33268-66   EWP(j)/EWT(m)   RM

ACC NR: AR6016191   SOURCE CODE: UR/0058/65/000/011/D025/D025

AUTHOR: Kazitsyna, L. A.; Kikot', B. S.; Ashkinadze, L. D.; Reutov, O. A.   63

TITLE: Correlation of frequencies and intensities of ir absorption bands of   B
diazonium salts X-C6H4N2Cl with the constants of the substitutes

SOURCE: Ref. zh. Fizika, Abs. 11D188

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 130-137

TOPIC TAGS: ir absorption, absorption band, diazonium salt, chemical bonding, line
intensity

ABSTRACT: The authors measured the integral intensities of the absorption bands, cor-
responding to the valence vibrational bond $N\equiv N$, for methanol solutions of diazonium
chlorides $X-C_3H_4N_2Cl$, where X = $\Pi-CH_3O$, $\Pi-CH_3$, $\Pi-Cl$, H, M-Cl, $\Pi-NO_2$, and $M-NO_2$. It
is shown that the integral intensity changes in the range from 0.62×10^{-4} for $M-NO_2$
to 3.85×10^{-4} $cm^{-2}mole^{-1}liter$ for $\Pi-CH_3O$. It is also found that logarithms of the
integral intensities and the frequencies of the valence vibrations of the $N\equiv N$ bond
of diazocations, measured for dilute solutions of diazonium chlorides, depend
linearly on the values of the Hammett constants of the substitutes of the benzene
ring. For the substitutes $\Pi-CH_3O$ and $\Pi-OH$, the linearity of these dependences is
retained only if the values of σ^+ are used in place of the Hammett constants σ.
[Translation of abstract]

SUB CODE: 20, 07

Card 1/1

YAKUBOVSKAYA, V.I.; KIKOT, G.I.

Action of some therapeutic preparations on the development of
experimental hepatitis. Zdrav. Kazakh. 22 no.2:49-53 '62.

(MIRA 15:4)

1. Iz kafedry biokhimii (zav. - dotsent V.I.Yakubovskaya)
Karagandinskogo meditsinskogo instituta.

(LIVER—DISEASES)   (DRUGS—TOXICOLOGY)

KIKOT', G.I.

Economic efficiency of using a fourth air preheater in an old
style blast furnace. Met. i gornorud. prom. no. 2:62-63 Mr-Ap '64.
(MIRA 17:9)

PLATE, A.F.; KIKOT', G.S.

Homogeneous destructive hydrogenation of p-(α,α -dimethylbenzyl)
phenol.   Zhur.ob.khim. 32 no.6:1828-1831 Je '62.   (MIRA 15:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
          (Phenol)   (Hydrogenation)

DEREVITSKAYA, V. A.; KIKOT', G. S.; KOCHETKOV, N. K.

Methylation of the blood group substance A. Izv AN SSSR
Ser Khim no. 4:761-763 Ap '64.   (MIRA 17:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

KIKOTI, G.P., inzhener; ORENTLIKHER, L.P.; DANILOV, N.N., inzhener.

Making large-panel walls on the construction site. Mekh.trud.rab.
9 no.2:21-23 F'55.   (MLRA 8:4)
        (Walls)

KIKOTI, G.P., inzhener; SKVORTSOV, S.G., inzhener; ORENTLIKHER, L.P., inzhener; DANILOV, N.H., inzhener; FOMIN, F.M., inzhener.

Making large panel wall slabs from gypsum concrete in vertical forms using vibration drainage and vacuum processes. Rats. i izobr.predl.v strei. no.121:12-17 '55.   (MLRA 9:7)

1.Trest "Streitel'" (for Kikoti, Skvortsov, Orentlikher, Danilov)
2.Trest TSentrostankostrey (for Fomin, Debrzhanskiy).
          (Walls) (Concrete slabs)

NIKOLAYEV, K.P., gornyy inzh.; KUDRYAVTSEV, M.V., gornyy inzh.; KIKOVKA, Ye.I., gornyy inzh.

Simultaneous permanent and cross trenching. Gor. zhur. no.2:
21-24 F'62.
(MIRA 17:2)

1. Novo-Krivorozhskiy gorno-obogatitel'nyy kombinat.

U

ALEKSEYEV, F.K.; ANDRIYUTS, G.L.; ARSENT'YEV, A.I.; ASTAF'YEV, Yu.P.;
BEVZ, N.D.; BEREZOVSKIY, A.I.; GENERALOV, G.S.;
DOROSHENKO, V.I.; YESHCHENKO, A.A.; ZAPARA, S.A.; KALINICHENKO, V.F.;
KARNAUSHENKO, I.K.; KIKOVKA, Ye.I.; KOBOZEV, V.N.; KUPIN, V.Ye.;
LOTOUS, V.K.; LYAKHOV, N.I.; MALYUTA, D.I.; METS, Yu.S.; OVODENKO,
B.K.; OKSANICH, I.F.; PANOV, V.A.; POVZNER, Z.B.; PODORVANOV, A.Z.;
POLISHCHUK, A.K.; POLYAKOV, V.G.; POTAPOV, A.I.; SAVITSKIY, I.I.;
SERBIN, V.I.; SERGEYEV, N.N.; SOVETOV, G.A.; STATKEVICH, A.A.;
TERESHCHENKO, A.A.; TITOV, O.S.; FEDIN, A.F.; KHOMYAKOV, N.P.;
SHEYKO, V.G.; SHEKUN, O.G.; SESTAKOV, M.M.; SHTAN'KO, V.I.

Practice of construction and exploitation of open pits of Krivoy
Rog Basin mining and ore dressing combines. Gor. zhur. no.6:
8-56 Je '63.
(MIRA 16:7)

(Krivoy Rog Basin—Strip mining)

ARSENT'YEV, A.I., dotsent, kand. tekhn. nauk; OVODENKO, B.K., gornyy
inzh.; KIKOVKA, Ye.I., gornyy inzh.; MAIYUTA, D.I., gornyy inzh.;
NIKOLAYEV, K.P., gornyy inzi.

Speeding up stripping and development of the "+15m" level of
the strip mine at the Southern Mining and Ore Dressing Combine.
Sbor. nauch. trud. KGRI no.15:17-22 '63.   (MIRA 17:8)

VOLYNETS, M.A., gornyy inzh.; KIKOVKA, Ye.I., gornyy inzh.; TKACHENKO, A.P.

Blasting operations in the pit of the New Krivoy Rog Mining
and Ore Dressing Combine. Vzryv. delo no.53/10:163-171 '63.
(MIRA 16:8)

1. Novo-Krivorozhskiy gornoobogatitel'nyy kombinat imeni
Leninskogo komsomolo (for Volynets, Kikovka). 2. Krivorozhskiy
gornorudnyy institut (for Tkachenko).
(Krivoy Rog Basin—Blasting)

DUBENYUK, V.M., gornyy inzh.; SEMENENKO, V.I., gornyy inzh.; SHABLIY,
V.I., gornyy inzh.; KIKOVKA, I.Ye., gornyy inzh.

Aeration of mines by a reactive ventilation equipment. Gor.
zhur. no.10:75-77 O '65.
(MIRA 18:11)

1. Krivorozhskiy gornorudnyy institut (for Dubenyuk, Semenenko).
2. Novo-Krivorozhskiy gornoobogatitel'nyy kombinat (for Kikovka,
Shabliy).

MALYUTA, D.I., inzh.; VO'YNETS, M.A., inzh.; KIKOVKA, Ye.I., inzh.; KNYAZEV, K.I., inzh.; YEFREMOV, E.I., kand. tekhn. nauk; IL'IN, V.I., inzh.

Experience in the blasting of hard ores by deep boreholes in the open-pit mine of the Krivoy Rog Mining and Ore Dressing Combine. Vzryv. delo no.57/14:145-151 '65.   (MIRA 18:11)

1. Novo-Krivorozhskiy gornoobogatitel'nyy kombinat (for Malyuta, Volynets, Kikovka, Knyazev). 2. Filial Instituta mekhaniki AN UkrSSR. (for Yefremov, Il'in).

DRUKOVANYY, M.F., kand. tekhn. nauk; YEFREMOV, F.I., kand. tekhn. nauk,
    KOMIR, V.M., inzh.; MALYUTA, D.I., inzh.; VOLYNETS, M.A., inzh.,
    KIKOVKA, Ye.I., inzh.

Ways of further improvements in the design of charges for blasting
operations in mines. Vzryv. delo no.57/14:198.200 '65.
                                            (MIRA 18:11)
1. Filial instituta mekhaniki AN UkrSSR (for Drukovanyy, Yefremov,
Komir). 2. Novo-Krivorozhskiy gornoobogatitel'nyy kombinat imeni
Leninskogo komsomola (for Malyuta, Volynets, Kikovka).

KIKOVSKIY, I A

PHASE I BOOK EXPLOITATION   SOV/5583   '7

Podkletnov, Ye. N., Stalin Prize Winner, ed.

Emal' i protsessy emalirovaniya (Enamels and Enameling Processes) Moscow,
Mashgiz, 1961. 113 p. 4,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta
Ministrov UkrSSR. Institut tekhnicheskoy informatsii.

Ed.: N. P. Onishchenko; Tech. Ed.: M. S. Gornostaypol'skaya; Chief Ed.:
Mashgiz (Southern Dept.); V.K. Serdyuk, Engineer.

PURPOSE: This book is intended for engineering and technical personnel concerned
with the research, production, and uses of enamel.

COVERAGE: This collection of articles on enamels and enameling processes is
based on material presented at the first Ukraine-wide conference on the pro-
duction of enamel and enameled equipment, organized by the State Scientific
Technical Committee of the Ukrainian SSR, the Kiyev Sovnarkhoz, Chemical

Card 1/4

Society imeni Mendeleyev, Scientific Technical Society of the Machine-Building Industry, and other sovnarkhozes, scientific research institutes, and planning organizations. [The name, place, and date of the conference are not given.] The following are discussed: old and new types of enamels, their composition, properties, uses, and methods of production; the production of enameled equipment (chemical apparatus, pipes, cisterns, etc.), and their use in the coal, chemical, food, and other industries; latest advances in the mechanization of enameling processes and techniques; the effect of underlying surfaces on the quality of enamel coatings; and methods of modifying the properties of enamel coatings, e.g., increasing their chemical stability. American and Chinese practices and production are also briefly discussed. No personalities are mentioned. There are 32 references: 22 Soviet, 7 English, and 3 German.

TABLE OF CONTENTS:

Card 2/4

KIKTA, T., mgr.

The pharmaceutical industry in the Hungarian People's
Republic. Farmacja polska 18 no.12:298 25 Je '62.

Title...

Author: T. KIKTA (Affiliation not given)

"From the Pharmacy School of the College of Medicine in Krakow."

Warsaw, Farmacja Polska, Vol 18, No 21, 10 Nov 1962; pp 529-53?.

Abstract: A review of activities during 1960: 71 publications prepared on as many completed studies; these are listed by number and Head of each Department, as well as by journal in which published. Some data about the internal organization, facilities and staff are given.

- E N D -

3/1

2401, 2424, 2473
CSO: 2200-N

KIKTA, T., Dr.

"Papers for the degree of doctors of medicine, stomatology, and pharmacy during the years 1945-1951" by Zbigniew Wozniewski. Reviewed by T. Kikta. Farmacja Pol 19 no. 13/14:309 25 Jl '63.

KIKTA, Teodor, mgr.

Professor Konstanty Hrynakowski, pioneer of emancipated phar-
meceutical studies, 1878-1938. Farmacja Pol. 19 no.17/18:
355-357   25 S'63

*

KIKTA, Teodor, mgr.

The new Soviet pharmacopoeia. Farmacja polska 18 no.12:293-294
25 Je '62.

✳

KIKTA, T.

"Dictionary of standards of organic and inorganic reagent used in labora-
torial work." Reviewed by T. Kikta.   Farmacja Pol 18 no.23:580 10 D '62.

KIKTA, T., mgr

From the Department of Pharmacy of the School of Medicine in
Krakow. Farmacja Pol 18 no.21:529-530 10 N '62.

POLAND

KIKTA, T., Magister [Affiliation not given]

"Jedrzej Sniadecki, on the 125th Anniversary of His Death."

Warsaw, Farmacja Polska, Vol 19, No 10, 25 May 63, p 218.

Abstract: A brief sketch of the life and works of the famous Polish naturalist (1768-1838), the first to introduce instruction of chemistry and pharmacy in Polish, as well as the founder of publications in this language, may of which were translated to other languages. There are no references.

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1588

CSO: 2000-N

- End -

30

KIKTA, T., mgr

The Polfa Pharmaceutical Works in Tarchomin entertained professor pharmacists. Farmacja Pol 19 no.4:83-84 25 F '63.

KIATA, T.

One hundredth anniversary of Warsaw Main School (Szkola
Glowna). Farmacja Pol 19 no.8:164 25 Ap '63.

KIKTA, T., mgr

Jedrzej Sniadecki; on the occasion of the 125th anniversary of his death. Farmacja Pol 19 no.10:218 25 My '63.

KIKTENKO, A.

Transportation of cotton wool without containers. Avt. transp.
42 no.10:9 O '64.   (MIRA 17:11)

1. Upravlyayushchiy Turkmenskim avtotrestom "Sel'khoztrans".

25(7)   SOV/117-59-7-14/28

AUTHOR: Lobikov, Yu.V. and Kiktenko, A.K.

TITLE: An Attachment for Boring Bearing Bushings Having
              a Hyperbolical Curve

PERIODICAL: Mashinostroitel', 1959, Nr 7, pp 30-31 (USSR)

ABSTRACT: Information is given on the design and operation of
              a new attachment designed and used at the Kolomens-
              kiy teplovozostroitel'nyy zavod imeni Kuybyshev
              (Kolomna Diesel Locomotive Plant imeni Kuybyshev)
              for boring bushings having a diameter difference of
              0.03 to 0.04 mm between the middle and the ends,
              the bore diameter changing on a hyperbolic curve.
              The attachment is used on the diamond boring ma-
              chine "2A715". There are 3 diagrams.

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